

Back-UPS Office ® 280

User's Manual

990-2051A Revision 2 10/98

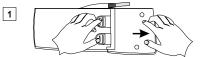
Check the building

A lit indicator means that a shock hazard exists due to faulty building wiring, that should be corrected by a qualified electrician. Refer to Status Indicators for more details.

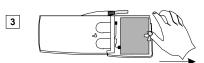
Installation

Connect battery wire

The UPS is shipped with one battery wire disconnected - in compliance with Department of Transportation (DOT) regulations. The UPS will not operate until you connect the wire to the



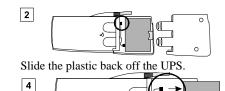
Press "in" the two tabs on the UPS bottom.



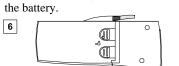
Flex the battery retainer to the right so that battery can be lifted out.



Slide the plastic piece to the left until the locking tabs lock into place.



Connect the battery wire to the socket on the



Procedure complete.

Place / Power

- 1. Place the UPS to avoid:
 - Direct sunlight
 - Excessive heat
 - Excessive humidity or contact with liquids







The UPS can be wall mounted (optional) see mounting instructions on back.

2. Plug the UPS directly into the power outlet; **not** into a surge protector or generator.



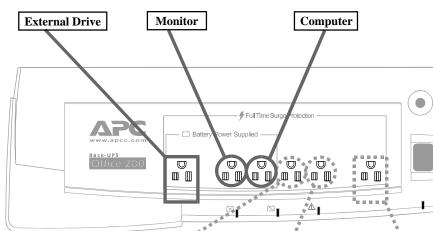
wiring fault indicator



Connect equipment to UPS

Three - Battery Power Supplied Outlets (solid lines) Data sensitive equipment such as a computer, monitor, and external drives are connected to these outlets. When the UPS is switched "On," conditioned utility power is supplied. Battery power is automatically provided in case of utility failure. No power (utility or battery) is supplied to these outlets when the UPS is switched "Off."

Three - Surge Only Protected Outlets (dashed lines) Devices like a printer, fax machine, scanner, or even a desk lamp should be powered by these outlets. These outlets do not provide power during a power outage. These three outlets are powered whenever utility power is available and the UPS is switched "On."



Equipment Connection Example

Scanner **External Fax**

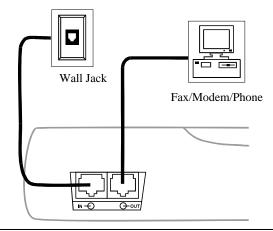


Connect Fax/Modem/Phone to surge protection

Socket Location: back side

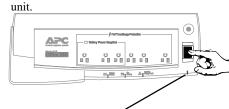
APC Back-UPS Office protects modem, fax, or phone from surges when it is connected through the UPS as shown in the adjacent drawing.

Note: Telephone line surge protection can be rendered inoperable if connections are not made as shown.





1. Press the "On/Off" switch to power the



A lit On Line (green) indicator confirms that the UPS is "On." All outlets are now powered.

Self-Test

A UPS Self -Test is performed whenever the unit is switched on and every two weeks of operation. Details about Self-Test can be found in the Self-Test section.

Printer

Battery charging

- The battery charges whenever the UPS is connected to utility power and is switched "On."
- UPS runtime is reduced until the battery is fully charged (approximately four hours).

Keep the UPS "plugged in" and switched "On" to maximize available runtime.

Status Indicators

The visual and audible UPS status indicators are described below:

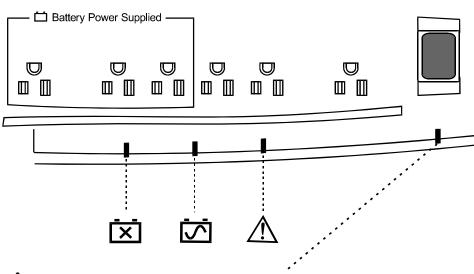
Replace Battery (red) - This indicator lights when a UPS Self -Test has determined the battery is weakened by frequent outages or is near the end of its useful life. Leave the UPS "On" overnight to recharge, then repeat the Self -Test. If the Replace Battery indicator is still lit, the battery should be replaced within two weeks (see Battery Replacement). Failure to promptly replace the battery risks the possibility of premature shut-down during a power outage.

Chirps for 1 Minute Every 5 Hours -This alarm indicates the battery has failed the Self-Test.

On Battery (yellow) - This indicator lights when utility power is unavailable or outside safe limits. The UPS battery is powering the Battery Power Supplied outlets.

Four Beeps Every 30 Seconds - This alarm indicates Battery Power Supplied outlets are now battery powered. The alarm ceases when the UPS returns to "On Line" operation.

Continuous Beeping - This alarm indicates a Low Battery condition is reached. Battery runtime is very low. Immediately, perform the UPS Shutdown Procedure.



Building Wiring Fault (red) - If the building wiring fault indicator is lit, one of the following conditions exists:

- Open or high resistance ground
- Hot and neutral polarity reversal
- Overloaded neutral circuit

Improper building wiring will not prevent the UPS from operating but will limit its protection capability. Faulty building wiring could result in equipment damage that is not covered by APC. Please refer to APC's Equipment Protection Policy for details.

On Line (green) - This indicator is lit whenever the UPS is switched "On" and it is supplying conditioned utility power to the outlets. This indicator is unlit for approximately four seconds during the Self -Test.

Overload Audible Indicators



Continuous Beeps for 30 Seconds -This alarm indicates the UPS has detected an overload after Self-Test.

Continuous Two-tone Beep - This alarm indicates a severe overload is detected while operating on-battery. The UPS will emit this sound until the UPS shuts down.

UPS Shutdown Procedure

When the On Battery indicator is lit, follow this procedure to shutdown the computer, UPS, and any equipment connected to the Battery Power Supplied Outlets.

- 1. Save the files you are working on.
- 2. Exit all applications cleanly.
- 3. Perform an orderly shut down of the operating system.
- 4. Switch "Off" all equipment connected to the UPS.
- 5. Switch "Off" the UPS to maintain battery capacity.

Note: The procedure above needs to be completed **before** the battery is fully discharged. Loss of data or corruption of the operating system is possible if this procedure is not completed before the battery is fully discharged.

Self-Test

A Self-Test can be started at any time by switching the UPS "Off" and then "On." A Self -Test is performed automatically every two weeks of **continuous** operation.

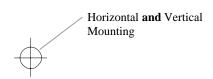
- Perform the UPS Shutdown Procedure before switching the UPS "Off."
- · A Self-Test should be performed with all connected devices switched "On." whenever a device is first connected to a Battery Power Supplied Outlet.

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Wall Mounting of UPS (optional)

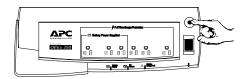
APC Back-UPS Office can be mounted vertically or horizontally to a wall surface. Use the template below to position the securing fasteners (not supplied) .

Note: Position the On/Off switch to the right for horizontal mounting, to the top for vertical.



- 1. Hold this page against the wall with the appropriate edge parallel to the floor.
- 2. Use thumbtacks to hold this page in place. Make sure the template circles line up where you want the mounting fasteners to be installed. Use a sharp nail or pin to puncture the center of each appropriate template circle to mark the wall.

Circuit Breaker



If APC Back-UPS Office is severely overloaded the circuit breaker will trip to disconnect the unit from utility power. When this occurs, the button will pop up, and no outlets will provide power. If this happens, consult the Troubleshooting section.

Order Replacement Battery

The APC part number for APC Back-UPS Office 280 replacement battery cartridge (RBC) is **RBC10**. A replacement battery can be ordered from local retailers, APC, or the APC website.

Battery Replacement

Battery replacement is a safe procedure, isolated from electrical hazards.

Do not replace the battery when the UPS is "On-Battery."

Please consult the diagrams in the "Connect Battery Wire" procedure during this procedure.

Procedure:

- 1. Switch "Off", and unplug all equipment from APC Back-UPS Office.
- 2. Switch "Off" APC Back-UPS Office, and unplug it from the wall outlet.
- 3. Refer to the "Connect battery wire" (Step 1) section of the manual for instructions on how to open the battery compartment.
- 4. Disconnect the battery wires one at a time.
- 5. Grasp each wire connector and pull straight back. Take care not to pull the wires.
- 6. Remove the old battery.
- Connect the red wire to the positive (+) battery terminal of the replacement battery.
 Connect the black wire to the negative (-) battery terminal.
- Tip the new battery, terminal end first, into the battery compartment. Press the battery gently until the retaining clip snaps into place.

Note: Small sparks at the battery connections are normal during connection.

9. Slide the battery compartment cover back into place. The new battery must be charged for at least 4 hours before full runtime can be expected.

Note: The spent battery must be recycled. Deliver the battery to an appropriate recycling facility or return it (in the new battery's packing material) to APC. See the new battery instructions for additional recycling information.

UPS Storage

Before storing, charge the UPS for at least 10 hours.

Store the UPS covered and upright in a cool, dry location.

Extended Storage

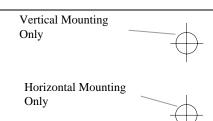
Storage Temperature	Recharge Frequency	Charging Duration
5 to 86°F (-15 to 30°C)	Every 6 Months	10 Hours
86 to 113°F (30 to 45°C)	Every Month	10 Hours

Specifications

Acceptable Input Voltage	0 - 150 Vac, Single Phase		
"On Battery" Output Voltage	109-121 Vac		
Frequency Limits ("On Line")	57 - 63 Hz		
Maximum Load - Battery Power Supplied Outlets	280 VA, 170 W		
Maximum Load - Surge Protected Only Outlets	10 A		
Typical Recharge Time	12 hours from total discharge		
Operating /Storage Temperature	32 to 95°F (0 to 35°C) / 5 to 113°F (-15 to 45°C)		
Operating and Storage Relative Humidity	0 to 95%, non-condensing		
Operating Elevation/ Storage Elevation	0 to +10,000 ft (0 to +3,000 m)	0 to +50,000 ft (0 to +15,000 m)	
UPS Size (H x W x D) excluding cord	2.7 x 17.0 x 7.0 in (6.9 x 43.2 x 17.8 cm)		
UPS Weight / Shipping Weight	8.0 lb (3.6 kg)	8.5 lb (3.9 kg)	
EMI Classification	FCC/DOC Class B		

Warranty

Users must contact customer service to troubleshoot the unit before returning the unit to APC. The standard warranty is 2 years from date of purchase. APC's standard procedure is to replace the original unit with a factory reconditioned unit. Customers who must have the original unit back due to assigned asset tags and set depreciation schedules must declare such a need at first contact with APC Customer Service. APC will ship out the replacement unit once the defective unit has been received by the repair department or cross ship upon the provision of a valid credit card number. The customer pays for the shipping to APC, and APC pays ground freight transportation costs back to the customer.



- 3. Install fasteners at the marked locations. Leave the head of both fasteners 5/16" (8 mm) out from the surface of the wall. Fasteners must be able to support 15 lb (6.8 kg).
- 4. Mount APC Back-UPS Office by positioning the key-hole slots over the fastener heads. For vertical mounting, slide the unit down into place. For horizontal mounting, turn it slightly counterclockwise until it is securely in place.

Troubleshooting

Symptom	Possible Cause	Solution
If the UPS is switched "On," outlets are not working, and the On Line indicator-unlit.	The battery wire is not connected.	Connect the battery wire as shown in Step 1 of the installation instructions (front page of the User's Manual.).
Circuit breaker popped up.	The outlets are overloaded.	Unplug one piece (or more) of equipment from the UPS and reset the breaker by pressing the button in.
UPS does not provide expected runtime.	The battery is not charged.	UPS does not charge the battery when it is turned "Off." Always keep the UPS "On" when utility power is available.
	The battery is depleted by frequent power outages.	After saving files and switching "Off" the computer, switch the UPS "Off" during extended power failures-to conserve battery capacity.
UPS fails to power the connected equipment during utility failure or Self -Test, and beeps for 30 seconds.	The Battery Power Supplied outlets are overloaded.	Unplug one piece of equipment from the Battery Power Supplied outlets.
On Battery indicator is lit and is accompanied by a two-tone audible alarm. Run time is reduced.	The Battery Power Supplied outlets are severely overloaded.	Unplug one piece of equipment from the Battery Power Supplied outlets. Perform the UPS Shutdown Procedure
		Switch the On/Off switch to "Off," and then "On" again. If no overload alarm is sounded
		when the Self-Test is completed, the unplugged device is likely to be responsible for the overload.

Service

Note: If the UPS requires service, do not return it to the dealer! The following steps should be taken.

- 1. Consult the Troubleshooting section to eliminate common problems.
- 2. Verify that the circuit breaker is not tripped. A tripped circuit breaker is the most common UPS problem!
- 3. If the problem persists, consult the APC web site (www.apcc.com) or contact APC at (800-800-4272).
 - Record the model number of the UPS, the serial number, and the date purchased. Be prepared to troubleshoot the problem over the telephone with a technician If this is not successful, the technician will issue a Return Merchandise Authorization Number (RMA#) and a shipping address.
- $4. \ \ If customer service troubleshooting is unsuccessful:$
 - If the UPS is under warranty, repairs are free
 - If the warranty has expired, there is a repair charge.
- 5. Disconnect the black wire from the UPS battery.

Department of Transportation (DOT) regulations require that the black battery wire be **disconnected before shipping the UPS back to APC**. The "Connect Battery Wire" instructions and graphics on the front page show how to access the wire.

6. Pack the UPS in its original packaging. If the original packing is not available, ask customer service about obtaining a new set. Pack the UPS properly to avoid damage in transit.

Note: Never use Styrofoam™ beads for packaging. Damage sustained in transit is not covered under warranty (insuring the package for full value is recommended).

- 7. Write the RMA# on the outside of the package.
- 8. Return the UPS by insured, prepaid carrier to the address **given to you by customer service**.

APC Contact Information



USA/Canada	
Mexico	
Brazil	
Worldwide	

1.800.800.4272 292.0253 / 292.0255 0800.12.72.1 1.401.789.5735

Internet and Tech Support

http://www.apcc.com